

District 05 Mobility Performance Report

2016 Second Quarter

DEPARTMENT OF TRANSPORTATION

August 24, 2016
: Sam Toh

2016 Second Quarter

EXECUTIVE SUMMARY

Overview

Caltrans District 5 contains five counties located in central coast California: Santa Barbara, San Luis Obispo, Monterey, Santa Cruz and San Benito Counties. There is no detection in San Benito County currently. All of the counties are in an urban setting within the cities limit and rural outside city limit. Santa Cruz and Monterey are the top two most congested counties in the 2nd quarter.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in the following performance measures:

- Vehicle Miles of Travel (VMT))
- Vehicle Hours of Delay (VHD), Bottleneck Locations
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on data collected every day of the quarter, twenty-four hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The MPR presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion while delay at 60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In the second quarter, total delay equaled 438,500 thousand vehicle hours of delay (VHD) at the 35 mph speed threshold, and 790,900 thousand VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 4,900 thousand VHD at 35 mph, and 8,800 thousand VHD at 60 mph.

Top Ten Bottlenecks for Quarter 2

County	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
MON	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	PM	330.075	79.54	61	3.17705	24767.9	8180
SB	US101-N	CASSITAS PASS RD 101 NB VDS MLNB	AM	85.408	2.485	62	2.9	13241.4	5530
SB	US101-S	CABRILLO BLVD SB 101 PM 94.57 VD	PM	94.55	11.662	59	1.34746	10565.3	6470
SLO	US101-S	SPYGLASS DR 101 SB VDS MLSB SB	PM	193.322	19.797	35	2.36571	7650.1	4615
SCR	SR1-S	NB1 to NB 17 conn	PM	368.018	16.72	44	5.43636	7211.4	2980
MON	SR1-N	CASA VERDE WAY HWY 1 SB VDS MLNB	PM	329.082	78.547	35	2.68571	7010.1	2710
MON	SR1-N	CARPENTER RD HWY 1 NB VDS MLNB N	PM	324.954	74.419	36	2.74167	3803.3	3610
SB	US101-N	SAN YSIDRO RD 101 NB VDS MLNB NB	PM	92.954	10.039	11	3.73636	2246.8	1485
MON	SR1-S	OCEAN AVE HWY 1 NB VDS MLSB SB	PM	324.196	73.727	36	0.83611	2068.3	7960
MON	SR1-S	STRUVE RD HWY 1 SB VDS MLSB SB	PM	347.255	98.193	26	2.39231	1750.9	2435

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Million)</p> <table><tr><th>Quarter</th><th>VMT (Million)</th></tr><tr><td>2015 Q2</td><td>429.2</td></tr><tr><td>2016 Q1</td><td>408.4</td></tr><tr><td>2016 Q2</td><td>640.7</td></tr></table>	Quarter	VMT (Million)	2015 Q2	429.2	2016 Q1	408.4	2016 Q2	640.7	Over one year ago	Over last quarter
		Quarter	VMT (Million)								
2015 Q2	429.2										
2016 Q1	408.4										
2016 Q2	640.7										
		49.3% ↑	56.9% ↑								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousand)</p> <table><tr><th>Quarter</th><th>VHD (Thousand)</th></tr><tr><td>2015 Q2</td><td>221</td></tr><tr><td>2016 Q1</td><td>193.9</td></tr><tr><td>2016 Q2</td><td>438.5</td></tr></table>	Quarter	VHD (Thousand)	2015 Q2	221	2016 Q1	193.9	2016 Q2	438.5	Over one year ago	Over last quarter
		Quarter	VHD (Thousand)								
2015 Q2	221										
2016 Q1	193.9										
2016 Q2	438.5										
		98.4% ↑	126.1% ↑								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table><tr><th>Quarter</th><th>VHD (Hours)</th></tr><tr><td>2015 Q2</td><td>2612</td></tr><tr><td>2016 Q1</td><td>2471</td></tr><tr><td>2016 Q2</td><td>4900</td></tr></table>	Quarter	VHD (Hours)	2015 Q2	2612	2016 Q1	2471	2016 Q2	4900	Over one year ago	Over last quarter
		Quarter	VHD (Hours)								
2015 Q2	2612										
2016 Q1	2471										
2016 Q2	4900										
		87.6% ↑	98.3% ↓								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousand)</p> <table><tr><th>Quarter</th><th>VHD (Thousand)</th></tr><tr><td>2015 Q2</td><td>497.7</td></tr><tr><td>2016 Q1</td><td>394.6</td></tr><tr><td>2016 Q2</td><td>790.9</td></tr></table>	Quarter	VHD (Thousand)	2015 Q2	497.7	2016 Q1	394.6	2016 Q2	790.9	Over one year ago	Over last quarter
		Quarter	VHD (Thousand)								
2015 Q2	497.7										
2016 Q1	394.6										
2016 Q2	790.9										
		58.9% ↑	100.5% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours</p> <table><tr><th>Quarter</th><th>VHD (Hours)</th></tr><tr><td>2015 Q2</td><td>5964</td></tr><tr><td>2016 Q1</td><td>5070</td></tr><tr><td>2016 Q2</td><td>8800</td></tr></table>	Quarter	VHD (Hours)	2015 Q2	5964	2016 Q1	5070	2016 Q2	8800	Over one year ago	Over last quarter
		Quarter	VHD (Hours)								
2015 Q2	5964										
2016 Q1	5070										
2016 Q2	8800										
		47.5% ↑	73.6% ↓								

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph	<p>Hours (Thousand)</p> <p>■ 2015 Q2 ■ 2016 Q1 ■ 2016 Q2</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		–	–
		Largest Magnitude Increase over one year ago Sun/Hol 136.9% ↑	Largest Magnitude Increase over last quarter Sun/Hol 248.4% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays	<p>Hours (Thousand)</p> <p>— Weekday (2015 Q2) — Weekday (2016 Q1) — Weekday (2016 Q2)</p>	Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		–	7 PM -12% ↓
		Largest Magnitude Weekday Increase over one year ago 4 PM 103.5% ↑	Largest Magnitude Weekday Increase over last quarter 5 PM 88.7% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays	<p>Hours (Thousand)</p> <p>— Saturday (2015 Q2) — Saturday (2016 Q1) — Saturday (2016 Q2)</p>	Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		10 PM -52% ↓	11 PM -34.2% ↓
		Largest Magnitude Saturday Increase over one year ago 11 AM 114.7% ↑	Largest Magnitude Saturday Increase over last quarter 12 PM 180.5% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays	<p>Hours</p> <p>— Sunday/Holiday (2015 Q2) — Sunday/Holiday (2016 Q1) — Sunday/Holiday (2016 Q2)</p>	Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		–	6 AM -47.7% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago 12 PM 262.1% ↑	Largest Magnitude Sun./Holiday Increase over last quarter 12 PM 419% ↑

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	—
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Santa Cruz 67.6% ↑	Santa Cruz 155.7% ↑
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	—
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 89.2% ↑	PM Peak 979.5% ↑
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		51% ↑	51% ↑
		Change in Bad over one year ago	Change in Bad over last quarter
		-47% ↓	-47% ↓

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2016 Q2-2015 Q2		Difference 2016 Q2-2016 Q1		Rank		
		2015 Q2	2016 Q1	2016 Q2	Absolute	Percentage	Absolute	Percentage	2015 Q2	2016 Q1	2016 Q2
SR1	Santa Cruz	115,715	80,342	199,940	84,225	72.8%	119,598	148.9%	1	1	1
SR1	Monterey	28,703	33,138	86,015	57,313	199.7%	52,877	159.6%	3	3	2
US101	Santa Barbara	39,179	60,479	83,756	44,578	113.8%	23,278	38.5%	2	2	3
US101	San Luis Obispo	20,611	13,422	36,799	16,187	78.5%	23,377	174.2%	4	4	4
SR17	Santa Cruz	16,824	6,547	22,219	5,395	32.1%	15,672	239.4%	5	5	5
US101	Monterey	0	0	9,731	9,731		9,731				6
TOTALS		221,031	193,927	438,459	217,428	98.4%	244,532	126.1%			

New detections were installed in quarter 2, 2016 on US 101 between City of Salinas south to Prunedale area (PM 91.888-98.360). Therefore, there are no comparable data for 2015 Q2 and 2016 Q1 for this Route.